

PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIA  
Search PubMed  for   
Limits Preview/Index History Clipboard De

Display Summary  Sort  Save Text Clip Add Order  
Show: 20  Items 1-20 of 123 Page 1 of 7 Select page: 1 2 3 4 5 6 7

Entrez  
PubMed

- ☐ 1: Euqui EM, Houssay RH. Related Article:  
[Arthritogenic or protective effect of isolated mycobacterial cell walls]  
Medicina (B Aires). 1973 Jul-Aug;33(4):361-7. Spanish. No abstract available  
PMID: 4585473 [PubMed - indexed for MEDLINE]

PubMed  
Services

- ☐ 2: Houssay RH, Euqui EM. Related Article:  
[Effect of previous subliminal doses of mycobacterial adjuvant on adjuvant disease]  
Medicina (B Aires). 1971 Jul-Aug;31(4):281-8. Spanish. No abstract available.  
PMID: 4942876 [PubMed - indexed for MEDLINE]

Related  
Resources

- ☐ 3: Anacker RL, Ribi E, Tarmina DF, Fadness L, Mann RE. Related Article:  
Relationship of footpad sensitivity to purified protein derivatives and resistance to airborne infection with *Mycobacterium tuberculosis* of mice vaccinated with mycobacterial cell walls.  
J Bacteriol. 1969 Oct;100(1):51-7. No abstract available.  
PMID: 4981063 [PubMed - indexed for MEDLINE]

- ☐ 4: Azuma I, Kishimoto S, Yamamura Y, Petit JF. Related Article:  
Adjuvant activity of mycobacterial cell walls.  
Jpn J Microbiol. 1971 Mar;15(2):193-7. No abstract available.  
PMID: 4930810 [PubMed - indexed for MEDLINE]

- ☒ 5: Bartlett GL, Zbar B. Related Article:  
Adjuvants for a tumor-specific vaccine: Bordetella pertussis or mycobacterial cell walls attached to oil droplets.  
J Natl Cancer Inst. 1973 May;50(5):1385-90. No abstract available.

PMID: 4351399 [PubMed - indexed for MEDLINE]

- ☒ **6:** Ogura T, Yoshimoto T, Sakatani M, Nishikawa H, Masuno T, Kawase I, Namba M, Hirao F, Yamamura Y, Itoh M. Related Article:

[Action mechanism of cell wall skeleton of BCG and Nocardia rubra as immunomodulator]

Nippon Rinsho. 1981 Apr;39(4):1852-60. Japanese. No abstract available.

PMID: 7031297 [PubMed - indexed for MEDLINE]

- ☐ **7:** Kennedy JW. Related Article:

Cancer immunotherapy. A new explanation for some old observations.

Ariz Med. 1973 May;30(5):347-8. No abstract available.

PMID: 4573823 [PubMed - indexed for MEDLINE]

- ☐ **8:** [No authors listed] Related Article:

Immune therapy of malignant melanoma.

Can Med Assoc J. 1972 Sep 9;107(5):390-1. No abstract available.

PMID: 4561532 [PubMed - indexed for MEDLINE]

- ☒ **9:** Stavri D, Anagnoste V, Draghici D. Related Article:

[The protective activity of mycobacterial antigens. 3.

Protective activity of killed mycobacterial bodies]

Arch Roum Pathol Exp Microbiol. 1970 Mar-Jun;29(1):91-101. French. No abstract available.

PMID: 4936247 [PubMed - indexed for MEDLINE]

- ☐ **10:** Kotani S. Related Article:

[Biochemistry of immunologic adjuvant effect of Mycobacterial cell wall]

Kekkaku. 1975 Dec;50(11):455-60. Japanese. No abstract available.

PMID: 1221148 [PubMed - indexed for MEDLINE]

- ☒ **11:** Anacker RL, Barclay WR, Brehmer W, Goode G, List RH, Ribi E, Tarmina DF. Related Article:

Effectiveness of cell walls of Mycobacterium bovis strain BCG administered by various routes and in different adjuvants in protecting mice against airborne infection with Mycobacterium tuberculosis strain H37Rv.

Am Rev Respir Dis. 1969 Feb;99(2):242-8. No abstract available.

PMID: 4975012 [PubMed - indexed for MEDLINE]

☒ **12:** Lederer E.

Related Article:

Correlation of chemical structure and biological activity of mycobacterial cell walls and derived lipids.

Biochem J. 1972 Jun;128(1):17P. No abstract available.

PMID: 5085560 [PubMed - indexed for MEDLINE]

☐ **13:** Convit J, Ulrich M, Aranzazu N.

Related Article:

Vaccination in leprosy--observations and interpretations.

Int J Lepr Other Mycobact Dis. 1980 Mar;48(1):62-5. No abstract available.

PMID: 6988347 [PubMed - indexed for MEDLINE]

☐ **14:** Mathe G.

Related Article:

[The immunity mechanisms, for or against the cancer patient?]

Nouv Presse Med. 1973 Mar 3;2(9):553-5. French. No abstract available.

PMID: 4574115 [PubMed - indexed for MEDLINE]

☐ **15:** Misaki A, Yukawa S.

Related Article:

Studies on cell walls of Mycobacteria. II. Constitution of polysaccharides from BCG cell walls.

J Biochem (Tokyo). 1966 May;59(5):511-20. No abstract available.

PMID: 4289814 [PubMed - indexed for MEDLINE]

☐ **16:** Ribi E, Anacker RL, Barclay WR, Brehmer W, Harris SC, Leif WR, Simmons J. Related Article:

Efficacy of mycobacterial cell walls as a vaccine against airborne tuberculosis in the Rhesus monkey.

J Infect Dis. 1971 May;123(5):527-38. No abstract available.

PMID: 5000470 [PubMed - indexed for MEDLINE]

☒ **17:** Anacker RL, Bickel WD, Brehmer W, Niwa M, Ribi E, Tarmina DF. Related Article:

Immunization of mice by combinations of inactive fractions of Mycobacterium bovis strain BCG.

Proc Soc Exp Biol Med. 1969 Mar;130(3):723-30. No abstract available.

PMID: 4975293 [PubMed - indexed for MEDLINE]

☐ **18:** Ohta M.

Related Article:

[Adjuvant immunotherapy of lung cancer]

Rinsho Kyobu Geka. 1981;1(3):482-4. Japanese. No abstract available.

PMID: 6763319 [PubMed - indexed for MEDLINE]

- ☐ 19: [Kotani S, Watanabe Y, Narita T, Shimono T, Stewart-Tull DE.](#)

Related Article:

Immunoadjuvant activities of fungal cell walls.

Biken J. 1975 Jun;18(2):135-8. No abstract available.

PMID: 1180869 [PubMed - indexed for MEDLINE]

- ☐ 20: [Azuma I, Kanetsuna F, Kada Y, Takashima T, Yamamura Y.](#)

Related Article:

Adjuvant-polyarthritogenicity of cell walls of mycobacteria, nocardia and corynebacteria.

Jpn J Microbiol. 1972 Jul;16(4):333-6. No abstract available.

PMID: 4631613 [PubMed - indexed for MEDLINE]

Display	Summary	▼	Sort	▼	Save	Text	Clip Add	Order
Show: 20	▼	Items 1-20 of 123	Page 1 of 7 Select page: 1 2 3 4 5 6 7					

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Freedom of Information Act](#) | [Disclaimer](#)

i686-pc-linux-gnu May 24 2002 11:56:2

## Processing your request...

### Dialog Index Results

Your select statement is 'S MYCOBACTER? (15N)  
CELL(2W)WALL(50N)(IMMUNOMODULA? OR IDDM OR DIABET? OR  
AUTOIMMUN? OR GASTRITIS OR ARTHRITIS OR COLITIS)' in databases All.

☒ Select All   
 ☒ Clear Selections   
    

<u>File</u>	<u>Database Name</u>	<u>Hits</u>
<input type="checkbox"/> 5:	<u>BIOSIS Previews® (1969-present)</u>	24
<input type="checkbox"/> 6:	<u>NTIS - National Technical Information Service</u>	1
<input type="checkbox"/> 16:	<u>Gale Group PROMT® (1990 - present)</u>	8
<input type="checkbox"/> 20:	<u>Dialog Global Reporter</u>	10
<input type="checkbox"/> 34:	<u>SciSearch® - a Cited Reference Science Database - 1990-</u>	25
<input type="checkbox"/> 47:	<u>Gale Group Magazine Database</u>	3
<input type="checkbox"/> 50:	<u>CAB ABSTRACTS</u>	2
<input type="checkbox"/> 71:	<u>Elsevier Biobase</u>	8
<input type="checkbox"/> 73:	<u>EMBASE® (1974-present)</u>	37
<input type="checkbox"/> 76:	<u>Life Sciences Collection</u>	11
<input type="checkbox"/> 88:	<u>Gale Group Business A.R.T.S. (SM)</u>	5
<input type="checkbox"/> 94:	<u>JICST-EPlus - Japanese Science &amp; Technology</u>	2
<input type="checkbox"/> 107:	<u>Adis R&amp;D Insight</u>	1
<input type="checkbox"/> 128:	<u>Pharmaprojects</u>	1
<input type="checkbox"/> 129:	<u>Pharmaceutical and Healthcare Industry News Database (PHIND) - weekly</u>	1
<input type="checkbox"/> 135:	<u>NewsRx Weekly Reports</u>	1
<input type="checkbox"/> 144:	<u>PASCAL</u>	21
<input type="checkbox"/> 148:	<u>Gale Group Trade &amp; Industry Database(TM)</u>	9
<input type="checkbox"/> 149:	<u>Gale Group Health &amp; Wellness Database(SM)</u>	6
<input type="checkbox"/> 155:	<u>MEDLINE® (1966-present)</u>	38
<input type="checkbox"/> 156:	<u>TOXFILE</u>	3

<input type="checkbox"/> 159:	<u>CANCERLIT®</u>	7
<input type="checkbox"/> 162:	<u>CAB HEALTH</u>	3
<input type="checkbox"/> 172:	<u>EMBASE® Alert</u>	1
<input type="checkbox"/> 266:	<u>Federal Research in Progress (FEDRIP)</u>	1
<input type="checkbox"/> 272:	<u>ONTAP® EMBASE®</u>	1
<input type="checkbox"/> 286:	<u>BioCommerce Abstracts and Directory</u>	1
<input type="checkbox"/> 340:	<u>CLAIMS®/U.S. Patents</u>	1
<input type="checkbox"/> 348:	<u>European Patents Fulltext</u>	4
<input type="checkbox"/> 349:	<u>WIPO/PCT Patents Fulltext</u>	22

---

3/3,AB/1 (Item 1 from file: 5)

11824106 Biosis No.: 199900070215

**Wax D of *Mycobacterium tuberculosis* induced osteomyelitis accompanied by reactive bone formation in buffalo rats.**

**Author:** Kawabata Yoshihiro; Semba Ichiro; Hirayama Yoshikazu; Koga Toshitaka; Nagao Shigeki; Takada Haruhiko(a)

**Author Address:** (a)Dep. Microbiol. Immunol., Tohoku Univ. Sch. Dent., 4-1 Seiryō-machi, Aoba-ku, Sendai 980-8575\*\*Japan

**Journal:** FEMS Immunology and Medical Microbiology 22 ( 4 ): p 293-302 Dec., 1998

**ISSN:** 0928-8244

**Document Type:** Article

**Record Type:** Abstract

**Language:** English

**Abstract:** A suspension of heat-killed *Mycobacterium tuberculosis* in liquid paraffin has been reported to induce foot swelling accompanied by new bone formation in Buffalo (BUF) rats, which are low responders to the induction of adjuvant arthritis. In the present study, we found that wax D, a mycobacterial cell wall peptidoglycan fragment-arabinogalactan-mycolic acid complex, was an effective component of this bacterium for the induction of osteomyelitis accompanied by reactive bone formation in BUF rats. Chronic inflammation was produced in BUF rats by a single subcutaneous injection of wax D suspended in liquid paraffin. Other *Mycobacterium* species and *Gordona bronchialis* were also capable of inducing this reaction. Other bacterial cells including the acid-fast bacteria *Nocardia* and *Rhodococcus*, purified cell walls and peptidoglycans from *Lactobacillus plantarum*, wax C, cord factor, arabinogalactan and mycolic acid prepared from *M. tuberculosis* were inactive in this respect. In addition, when wax D was administered as a water-in-oil emulsion (Freund's type adjuvant), bone formation scarcely occurred in BUF rats. In Fisher (F344) and Wistar rats, both of which are responder strains to adjuvant arthritis, wax D in liquid paraffin did not induce bone formation.

1998

Biosis Previews(R) (Dialog® File 5): (c) 2002 BIOSIS. All rights reserved.

---

3/3,AB/3 (Item 3 from file: 5)

02984066 Biosis No.: 000070009684

**INDUCTIONS OF ADJUVANT ARTHRITIS IN RATS AND FOOT PAD  
SWELLING REACTION IN MICE BY INJECTION WITH THE PURIFIED CELL  
WALL FRACTION FROM IN-VITRO GROWN  
MYCOBACTERIUM-LEPRAEMURIUM**

**Author:** TANAKA T

**Author Address:** DEP. MICROBIOL., KURUME UNIV. SCH. MED., KURUME, TOKYO,  
JPN.

**Journal:** JPN J LEPR 48 (1). 1979. 19-26. 1979

**Full Journal Name:** Japanese Journal of Leprosy

**CODEN:** NRGZD

**Record Type:** Abstract

**Language:** JAPANESE

**Abstract:** *M. lepraemurium* Hawaii grown on 1% Ogawa's egg yolk medium was collected, washed and delipidated. Purified cell wall fraction (CWF) was prepared from the delipidated cells by sonicating and by digesting with trypsin and chymotrypsin. CWF was suspended in Freund's incomplete adjuvant (FIA) or in saline, or sometimes in oil-in-water solution, and then injected into the footpads of rats or mice. Arthritis induced by injection with 100 or 300 .mu.g of CWF into rat footpads was seen in the joints of both sides of the hind and front legs and in the joints of the tail. These symptoms were similar to those induced with Freund's complete adjuvant. When the same CWF was injected into the mouse footpad, localized footpad swelling was found but the type of arthritis seen in rats was not found. Mouse footpad swelling reaction, which was not dependent on the mouse strains, showed a dose response to CWF. Injection with CWF in FIA induced more severe and longer reactions than with CWF in saline. This footpad reaction in mouse seems not to be related to delayed hypersensitivity but due to inflammatory reaction with tissue damage, because re-injection of CWF into another footpad on the 30th day after primary injection with CWF caused no specific reaction. When CWF was injected in oil-in-water solution, a comparatively high rate of footpad swelling reaction was observed for a longer time. It seems due to the little damage to the tissue and the long-term stimulation to the host. Whole cells of *Mycobacterium*, Wax D from *M. tuberculosis* and cell wall fractions from various strains of mycobacteria have adjuvancy. These cells or cellular fractions consist of mycolic acid, arabinogalactan and mucopeptide as a standard cell wall skeleton. *M. lepraemurium* grown in vivo and in vitro have the mycolic acid-arabinogalactan-mucopptide complex in its cell wall fraction. CWF from *M. lepraemurium* showed similar adjuvancy to other



## Search History

## Database Details

Set	Term Searched	Items	
S1	MYCOBACTER? (15N) CELL(2W)WALL(50N)(IMMUNOMODULA? OR IDDM OR DIABET? OR AUTOIMMUN? OR GASTRITIS OR ARTHRITIS OR COLITIS)	254	<a href="#">Display</a>
S2	RD (unique items)	128	<a href="#">Display</a>
S3	S2 AND (BOVIS OR MAPG OR ARABINOGALACTAN(2N)PEPTIDOGLYCAN)	29	<a href="#">Display</a>
S4	S2 AND (UVEITIS OR SCLEROSIS)	15	<a href="#">Display</a>

Format

Free ▼

Number of  
Records

10

Show Database Details for:

5: BIOSIS Previews® (1969-present) ▼

[Blue-sheet](#)[Rates](#)[Fields](#)[Formats](#)[Sorts](#)[Limits](#)[Tags](#)

© 2002 The Dialog Corporation plc

mycobacteria. Cell walls of *M. bovis* BCG act as an adjuvant and cannot non-specifically enhance cell-mediated immunity. Injection of CWF into mouse footpad might not induce delayed-type hypersensitivity without any antigen.

1979

Biosis Previews(R) (Dialog® File 5): (c) 2002 BIOSIS. All rights reserved.

---

3/3,AB/4 (Item 4 from file: 5)

02214396 Biosis No.: 000064056920

**PREPARATION OF ARTHRITOGENIC HYDRO SOLUBLE PEPTIDO GLYCANS FROM BOTH ARTHRITOGENIC AND NONARTHRITOGENIC BACTERIAL CELL WALLS**

**Author:** KOHASHI O; PEARSON C M; WATANABE Y; KOTANI S

**Journal:** INFECT IMMUN 16 (3). 1977 861-866. 1977

**Full Journal Name:** Infection and Immunity

**CODEN:** INFIB

**Record Type:** Abstract

**Abstract:** Cell wall lytic enzyme (Kyowa lytic no. 2 enzyme) liberated arthritogenic hydrosoluble peptidoglycans from arthritogenic and non-arthritogenic bacterial cell walls [*Streptococcus salivarius*, *S. mutans*, *S. bovis*, *S. thermophilus*, *S. lactis*, *S. pyogenes*, *S. faecalis*, *Staphylococcus aureus*, *S. epidermidis*, *Bacillus megaterium*, *Micrococcus lysodeikticus* and *Mycobacterium smegmatis*]. Mutanolysin (peptidoglycan-degrading enzyme) also liberated hydrosoluble peptidoglycans from these cell walls which, however, lacked arthritogenicity. The chemical composition of these peptidoglycans indicates that their arthritis-inducing ability depends on a relatively long chain of glycan units that consists of repeating units of N-acetylglucosaminyl-N-acetylmuramic acid. The glycan chain lengths on these peptidoglycans appeared to be related to their adjuvancy rather than to an antigen(s) responsible for development of arthritis in rats.

1977

Biosis Previews(R) (Dialog® File 5): (c) 2002 BIOSIS. All rights reserved.

---

3/3,AB/8 (Item 1 from file: 47)

03806317 **Supplier Number:** 13211472 (USE FORMAT 7 OR 9 FOR FULL TEXT )

**Immunopharmacology: immunomodulation and immunotherapy. (Primer on Allergic and Immunologic Diseases, 3rd ed., Chapter 24)**

Hadden, John W.; Smith, David L.

JAMA, The Journal of the American Medical Association , v268 , n20 , p2964(6)

Nov 25 , 1992

ISSN: 0098-7484

**Language:** ENGLISH **Record Type:** FULLTEXT; ABSTRACT

**Word Count:** 4210 **Line Count:** 00376

**Abstract:** Many drugs can suppress or stimulate the immune system. Cytotoxic agents are a large group of immunosuppressive drugs and other agents that can kill actively dividing cells such as activated white blood cells. Examples are radiation, corticosteroids, and cyclosporine. Corticosteroids are often used to treat autoimmune disorders, allergies and skin disorders. Other immunosuppressive agents include alcohol and other drugs as well as environmental chemicals. The second group of agents are those that stimulate the immune system. Some are derived from naturally occurring biological substances, such as the interferons, interleukins, thymus hormones and certain products of bacteria and fungi. Chemically-synthesized agents include levamisole hydrochloride, inosine pranobex, muramyl dipeptide and the anti-ulcer drug cimetidine. Many other immunostimulatory drugs are under development.

Gale Group Magazine DB(TM) (Dialog® File 47): (c) 2002 The Gale group. All rights reserved.

---

3/3,AB/17 (Item 2 from file: 155)

01898063 74173430 PMID: 4208697

**[Arthrogenic activity of various mycobacterial preparations]**

Activite arthrogene de diffentes preparations mycobacteriennes.

Audibert F; Parant M; Petit J F; Adam A

Comptes rendus hebdomadaires des seances de l'Academie des sciences. Serie D: Sciences naturelles ( FRANCE ) Nov 12 1973 , 277 (19) p2097-100 , ISSN 0567-655X Journal Code: 7501107

Document type: Journal Article

Journal Announcement: FRENCH

Main Citation Owner: NLM

Record type: Completed

MEDLINE(R) (Dialog® File 155): . All rights reserved.

---

3/3,AB/18 (Item 3 from file: 155)

01741162 74036048 PMID: 4585473

**[Arthritogenic or protective effect of isolated mycobacterial cell walls]**

Efecto artrritogenico o protector de paredes celulares aisladas de micobacterias.

Eugui E M; Houssay R H

Medicina ( ARGENTINA ) Jul-Aug 1973 , 33 (4) p361-7 , ISSN 0025-7680  
Journal Code: 0204271

Document type: Journal Article

Journal Announcement: SPANISH

Main Citation Owner: NLM

Record type: Completed

MEDLINE(R) (Dialog® File 155): . All rights reserved.

---

3/3,AB/19 (Item 1 from file: 348)

01276239

A composition comprising a carrier and a purified mycobacterial lipid cell-wall component and its use in the prevention, treatment and diagnosis of disease

Title in German: Eine Zusammensetzung die ein Trager und ein reinigte Mykobakterielle-Zellwand Komponente enthalt und ihre Verwendung zur Verhinderung, Behandlung und Diagnose von Erkrankungen

**Title in French:** Composition renfermant un porteur et un composant lipidique membranaire mycobacterien purifie, son utilisation dans la prevention, le traitement et le diagnostic de maladies

**Patent Assignee:** Adcock Ingram Limited, (2624040), 17 Harrison Street, Bryanston 2021, (ZA), (Applicant designated States: all)

**Inventor:** Verschoor, Jan Adrianus, P.O. Box 70024 The Willows, Pretoria 0041, (ZA)  
Lenaerts, Anne, Steeneikstraat 35, Genk, (BE)  
Johannsen, Elzbieta, 45 Idol Road, Lynwood Glen, Pretoria 0002, (ZA)

**Legal Representative:** Lewin, John Harvey et al (33031), Elkington and Fife, Prospect House, 8 Pembroke Road, Sevenoaks, Kent TN13 1XR, (GB)

	<b>Patent Number</b>	<b>Kind</b>	<b>Date</b>
<b>Patent</b>	EP 1098199	A1	010509 (Basic)
<b>Application</b>	EP 203989		980303
<b>Priority</b>	ZA 971817		970303
	ZA 9710300		971114

**Designated States:** AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

**Related Patent Number(s) PN (AN):**  
EP 971733 (EP 98908232)

**International Patent** G01N-033/53

**Class:**

**Abstract** EP 1098199 A1

The invention relates to a method of diagnosing a mycobacterial infection in a subject comprising the steps of:

contacting a sample from the subject with a purified mycobacterial lipid cell-wall component or analog or derivative thereof or a synthetic form thereof or with a composition comprising a purified mycobacterial lipid cell-wall component or analog or derivative thereof or synthetic form thereof or with a conjugate comprising a

purified mycobacterial lipid cell-wall component or analog or derivative thereof or synthetic form thereof and a carrier associated therewith or a composition comprising the conjugate; and

detecting any reaction between the purified mycobacterial lipid cell-wall component or analog or derivative thereof or synthetic form thereof or composition or conjugate and the sample.

The invention also relates to detection means for detecting the presence of antibodies comprising a solid phase and the above purified mycobacterial lipid cell-wall component or analog, derivative, synthetic form, composition or conjugate.

**Abstract Word Count:** 155 **Note:**

**Figure number on first page:** NONE

**Language (Publication,Procedural,Application):** English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200119	417
SPEC A	(English)	200119	37350

Total word count	Document A	37767
Total word count	Document B	0
Total word count	Document A + B	37767

EUROPEAN PATENTS (Dialog® File 348): (c) 2002 European Patent Office. All rights reserved.

---

© 2002 The Dialog Corporation plc

3/3,AB/27 (Item 7 from file: 349)

00343776

**A METHOD FOR THE ISOLATION AND PURIFICATION OF LIPID CELL-WALL COMPONENTS**

**PROCEDE POUR ISOLER ET PURIFIER DES COMPOSANTS DE PAROIS DE CELLULES LIPIDIQUES**

**Patent Applicant/Assignee:**

BROWN Keith Edwin Frank,  
ADCOCK INGRAM LIMITED,  
VERSCHOOR Jan Andrianus,

**Inventor(s):**

VERSCHOOR Jan Andrianus,

**Patent and Priority Information (Country, Number, Date):**

**Patent:** WO 9626288 A1 19960829

**Application:** WO 96GB416 19960222 (PCT/ WO GB9600416 )

**Priority Application:** ZA 951464 19950222

**Designated States:** AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI  
GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO  
NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD  
SZ UG AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

**Publication Language:** English

**Fulltext Word Count:** 10825

**English Abstract**

A method, using a multi-phasic solvent system, for the simultaneous purification and separation of different classes of compounds, which may be cell-wall components or derivatives or analogues thereof which may be extracted from a culture of the relevant cells or which may be synthesized. The cell-wall components may be lipid cell-wall components of microbial origin which can be separated from contaminating material as a group.

**French Abstract**

Cette invention se rapporte a un procede qui utilise un systeme de solvants multiphases pour obtenir la purification et la separation simultanees de differentes classes de composes, qui peuvent etre des composants de parois cellulaires ou des derives analogues de ceux-ci, pouvant etre extraits d'une culture de cellules

pertinentes ou pouvant être synthétisées. Ces composants de parois cellulaires peuvent être des composants de parois de cellules lipidiques, d'origine microbienne, qui peuvent être séparés d'une substance contaminante sous la forme d'un groupe.

PCT FULLTEXT (Dialog® File 349): (c) 2002 WIPO/Univentio. All rights reserved.

---

3/3,AB/28 (Item 8 from file: 349)

00307592

**PEPTIDE FRAGMENTS OF MICROBIAL STRESS PROTEINS AND  
PHARMACEUTICAL COMPOSITION MADE THEREOF FOR THE TREATMENT  
AND PREVENTION OF INFLAMMATORY DISEASES**

**FRAGMENTS PEPTIDIQUES DE PROTEINES DE STRESS MICROBIENNES, ET  
COMPOSITION PHARMACEUTIQUE A BASE DE CEUX-CI DESTINEE AU  
TRAITEMENT ET A LA PREVENTION DES MALADIES INFLAMMATOIRES**

**Patent Applicant/Assignee:**

RIJKSUNIVERSITEIT UTRECHT,  
ANDERTON Stephen Mark,  
VAN DER ZEE Ruurd,  
VAN EDEN Willem,

**Inventor(s):**

ANDERTON Stephen Mark,  
VAN DER ZEE Ruurd,  
VAN EDEN Willem,

**Patent and Priority Information (Country, Number, Date):**

**Patent:** WO 9525744 A1 19950928

**Application:** WO 95NL108 19950321 (PCT/ WO NL9500108 )

**Priority Application:** AT 294200721 19940321; AT 694200738 19940322; AT  
394202927 19941010

**Designated States:** AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL  
PT SE

**Publication Language:** English

**Fulltext Word Count:** 13327

**English Abstract**

Peptides are provided which are useful for protection against or treatment of an inflammatory disease, including autoimmune diseases, such as diabetes, arthritic diseases, atherosclerosis, multiple sclerosis, myasthenia gravis, or inflammatory responses due to tumour or transplant rejection. The peptides contain a part of the



aminoacid sequence of a microbial protein having a conserved mammalian stress protein homologue, wherein the overall aminoacid sequence identity between the microbial and the mammalian homologues is at least 25 %, and the sequence identity between the microbial and the mammalian homologues of an area of at least 75 consecutive aminoacids is at least 30 %, said part comprising at least 5 aminoacids which are in the same relative position as the same aminoacids in a T cell epitope of said stress protein, which epitope contains at least 4 consecutive aminoacids which are identical with the corresponding mammalian stress protein aminoacids. Nucleotide sequences, expression systems, antibodies and pharmaceutical and diagnostic compositions derived from these peptides are provided as well.

### French Abstract

Peptides assurant la protection contre une maladie inflammatoire, ou le traitement de celle-ci, ladite maladie étant par exemple l'une des maladies auto-immunes telles que le diabète, les maladies arthritiques, l'athérosclérose, la sclérose en plaques, la myasthénie grave, ou les réponses inflammatoires dues à une tumeur ou à un rejet de greffon. Les peptides contiennent une partie de la séquence d'acides aminés d'une protéine microbienne possédant un homologue conservé de protéine de stress mammalien, l'homologie globale entre les séquences d'acides aminés des homologues microbien et mammalien étant d'au moins 25 %, et l'homologie entre les séquences des homologues microbien et mammalien dans une plage d'au moins 75 acides aminés consécutifs étant d'au moins 30 %. Ladite partie comporte au moins 5 acides aminés qui se trouvent dans la même position relative que les mêmes acides aminés présents dans un épitope de lymphocyte T de ladite protéine de stress, cet épitope renfermant au moins 4 acides aminés consécutifs identiques aux acides aminés correspondants de la protéine de stress mammalienne. On a également prévu des séquences nucléotidiques, des systèmes d'expression, des anticorps et des compositions pharmaceutiques et diagnostiques dérivés de ces peptides.

PCT FULLTEXT (Dialog® File 349): (c) 2002 WIPO/Univentio. All rights reserved.

---

3/3,AB/29 (Item 9 from file: 349)

00252342

**MEMBRANE-ASSOCIATED IMMUNOGENS OF MYCOBACTERIA**  
**IMMUNOGENES ASSOCIES A LA MEMBRANE DE MYCOBACTERIES**

**Patent Applicant/Assignee:**

KAPOOR Archana,  
MUNSHI Anil,

**Inventor(s):**

KAPOOR Archana,  
MUNSHI Anil,

**Patent and Priority Information (Country, Number, Date):**

**Patent:** WO 9400493 A1 19940106

**Application:** WO 93US6080 19930628 (PCT/ WO US9306080 )

**Priority Application:** US 92906395 19920629

**Designated States:** AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT  
SE

**Publication Language:** English

**Fulltext Word Count:** 12308

**English Abstract**

Nucleic acid encoding four novel immunodeterminant protein antigens of *M. bovis* BCG, which is a vaccine strain for tuberculosis, have been isolated. These genes were isolated as immunoreactive recombinant clones from a genomic library of *M. bovis* BCG DNA, constructed in pBR322 vector, and screened with sera collected from tuberculosis patients. The BCG DNA insert of one of the recombinants, pMBB51A, which expressed an antigen of Mr 90 kD, was sequenced completely and an ORF encoding 761 amino acids encoding a protein of deduced molecular weight 79 kD, was identified. This gene was identified to encode a membrane bound, ion-motive ATPase of *M. bovis* BCG. The approach described here can be used to identify immunogens of mycobacteria. In addition, the well-characterized *M. bovis* BCG antigens can be used in the prevention, diagnosis and treatment of tuberculosis. The 79 kD antigen is also useful in the design of recombinant vaccines against different pathogens. The sequence of the 79 kD membrane-associated polypeptides also are useful for the development of specific PCR amplification based diagnostic procedures for the detection of mycobacteria. Also, the promoter of the 79 kD antigen is useful for expressing homologous and/or heterologous antigens in mycobacteria.

**French Abstract**

L'acide nucleique codant quatre proteines antigeniques immunodeterminantes de *M. bovis* BCG qui constitue une souche de vaccin contre la tuberculose a ete isole. Ces genes ont ete isoles sous forme de clones immunoreactifs recombines a partir d'une banque genomique d'ADN de *M. bovis* de BCG, elabores dans un vecteur pBR322, et cribles a l'aide de serums preleves sur des patients atteints de tuberculose. L'insert d'ADN de BCG d'un des genes recombines, pMBB51A, qui exprimait un antigene de 90 kD, a ete entierement sequence et un cadre ouvert de lecture codant 761 acides amines codant une proteine presentant une masse molaire estimee a 79 kD, a ete identifie. Ce gene a ete identifie afin de coder une ATPase de BCG de *M. bovis* liee a

une membrane, de regulation d'ions. Cette nouvelle approche peut etre utilisee pour identifier des immunogenes de mycobacteries. De plus, les antigenes de BCG de M. bovis bien caracterises peuvent etre utilises dans la prevention, le diagnostic et le traitement de la tuberculose. L'antigene de 79 kD est egalement utile pour l'elaboration de vaccins recombinés contre differents germes pathogenes. La sequence de polypeptides de 79 kD associes a la membrane est egalement utile pour le developpement de procedures de diagnostic specifiques basees sur une amplification PCR pour la detection de mycobacteries. De plus, le promoteur de l'antigene de 79 kD est utile pour exprimer les antigenes homologues e/ou heterologues dans des mycobacteries.

PCT FULLTEXT (Dialog® File 349): (c) 2002 WIPO/Univentio. All rights reserved.

---

© 2002 The Dialog Corporation plc

4/3,AB/15 (Item 7 from file: 349)

00209505

**TREATMENT OF AUTOIMMUNE DISEASES BY ORAL ADMINISTRATION OF  
AUTOANTIGENS**

**TRAITEMENT DE MALADIES AUTO-IMMUNES PAR ADMINISTRATION  
ORALE D'AUTO-ANTIGENES**

**Patent Applicant/Assignee:**

BRIGHAM AND WOMEN'S HOSPITAL,

**Inventor(s):**

WEINER Howard L,

HAFLER David A,

**Patent and Priority Information (Country, Number, Date):**

**Patent:** WO 9206708 A1 19920430

**Application:** WO 91US7542 19911015 (PCT/ WO US9107542 )

**Priority Application:** US 90936 19901015

**Designated States:** AT AU BE BR CA CH DE DK ES FI FR GB GR HU IT JP KR LU  
NL NO SE

**Publication Language:** English

**Fulltext Word Count:** 14710

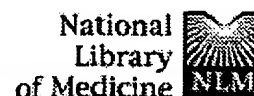
**English Abstract**

The invention is directed to a method of treating a T cell-mediated autoimmune disease in animals, including humans, by the oral administration of autoantigens, fragments of autoantigens, or analogs structurally related to those autoantigens, which are specific for the particular autoimmune disease. The method of the invention includes both prophylactic and therapeutic measures.

**French Abstract**

Le procede decrit, qui sert a traiter les maladies auto-immunes a mediation par les lymphocytes T chez les animaux, y compris chez l'homme, consiste a administrer par voie orale des auto-antigenes, des fragments d'auto-antigenes ou des analogues associes de facon structurelle a ces auto-antigenes, qui sont specifiques de la maladie auto-immune en question. Ce procede comprend des mesures a la fois prophylactiques et therapeutiques.

PCT FULLTEXT (Dialog® File 349): (c) 2002 WIPO/Univentio. All rights reserved.



PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIA

Search PubMed ☐ for

Limits Preview/Index History Clipboard De

Display Summary ☐ Sort ☐ Save Text Clip Add OrderShow: 20 ☐ Items 21-40 of 123 Page 2 of 7 Select page: 1 2 3 4 5 6 7Entrez  
PubMed

Selected: 6

☐ 21: Rozhavin MA.

Related Article:

[Autovaccines: a new look at an old preparation]

Lik Sprava. 1993 Jul;(8):39-44. Review. Russian. No abstract available.

PMID: 8079472 [PubMed - indexed for MEDLINE]

PubMed  
Services☐ 22: Gustafson GL, Rhodes MJ.

Related Article:

Bacterial cell wall products as adjuvants: early interferon gamma as a marker for adjuvants that enhance protective immunity.

Res Immunol. 1992 Jun;143(5):483-8; discussion 573-4. Review. No abstract available.

PMID: 1439127 [PubMed - indexed for MEDLINE]

☐ 23: Klemparskaia NN, Ulanova AM.

Related Article:

[Endogenous stimulators of immunogenesis]

Zh Mikrobiol Epidemiol Immunobiol. 1981 May;(5):108-9. Russian. No abstract available.

PMID: 7269910 [PubMed - indexed for MEDLINE]

Related  
Resources☐ 24: Larson CL, Baker RE, Baker MB.

Related Article:

Immunization of rabbits with viable BCG and nonliving cell wall vaccines.

Am Rev Respir Dis. 1968 Dec;98(6):944-53. No abstract available.

PMID: 4881317 [PubMed - indexed for MEDLINE]

☐ 25: Goldstein IJ, Misaki A.

Related Article:

Interaction of concanavalin A with an arabinogalactan from the cell wall of Mycobacterium bovis.

J BACTERIOL. 1970 AUG;103(2):422-3. NO ABSTRACT AVAILABLE.  
PMID: 4988242 [PubMed - indexed for MEDLINE]

☐ **26:** Jensen KA, Klaer I, Lundberg L. Related Article:

Studies of the antigenic structure of mycobacteria. IV.  
Acta Pathol Microbiol Scand. 1966;67(4):488-92. No abstract available.  
PMID: 5332514 [PubMed - indexed for MEDLINE]

☐ **27:** Brehmer W, Anacker RL, Ribi E. Related Article:

Immunogenicity of cell walls from various mycobacteria  
against airborne tuberculosis in mice.  
J Bacteriol. 1968 Jun;95(6):2000-4. No abstract available.  
PMID: 4970218 [PubMed - indexed for MEDLINE]

☒ **28:** Chedid L, Parant M, Parant F, Gustafson RH, Berger FM. Related Article:

Biological study of a nontoxic, water-soluble immunoadjuvant  
from mycobacterial cell walls.  
Proc Natl Acad Sci U S A. 1972 Apr;69(4):855-8. No abstract available.  
PMID: 4337242 [PubMed - indexed for MEDLINE]

☐ **29:** Bonhomme F, Boucheron C, Migliore D, Jolles P. Related Article:

Arthritogenicity of unaltered and acetylated cell walls of  
mycobacteria.  
Int Arch Allergy Appl Immunol. 1969;36(3):317-20. No abstract available.  
PMID: 4982194 [PubMed - indexed for MEDLINE]

☒ **30:** Taniyama T, Watanabe T, Azuma I, Yamamura Y. Related Article:

Adjuvant activity of mycobacterial fractions. II. In vitro  
adjuvant activity of cell walls of mycobacteria, nocardia and  
corynebacteria.  
Jpn J Microbiol. 1974 Nov;18(6):415-26. No abstract available.  
PMID: 4616109 [PubMed - indexed for MEDLINE]

☐ **31:** Work E. Related Article:

Biochemistry of bacterial cell walls.  
Lab Pract. 1969 Aug;18(8):831-8. No abstract available.  
PMID: 5802976 [PubMed - indexed for MEDLINE]

☐ **32:** Convit J. Related Article:

Regarding analysis of vaccines.  
Int J Lepr Other Mycobact Dis. 1995 Dec;63(4):576-7. No abstract  
available.

PMID: 8642226 [PubMed - indexed for MEDLINE]

- ☐ **33:** Georgesco V, Feteanu A, Anghel V, Michailov L. Related Article:  
[Research, by use of radioactive isotopes, on the distribution  
in the organism of a vaccine adsorbed on aluminum hydroxyde]  
Rev Immunol Ther Antimicrob. 1966 Apr-Jun;30(3):119-29. French. No  
abstract available.  
PMID: 4378349 [PubMed - indexed for MEDLINE]

- ☐ **34:** Urbaschek R, Urbaschek B. Related Article:  
Induction of nonspecific resistance and stimulation of  
granulopoiesis by endotoxins and nontoxic bacterial cell wall  
components and their passive transfer.  
Ann N Y Acad Sci. 1985;459:97-110. No abstract available.  
PMID: 3913372 [PubMed - indexed for MEDLINE]

- ☐ **35:** Triau R, Joubert L, Valette L, Mynard MC. Related Article:  
[Toxicological and pharmacological checking of freeze-dried  
B.C.G. vaccine for intradermal use]  
Rev Immunol Ther Antimicrob. 1967 Jan-Mar;31(1):61-74. French. No  
abstract available.  
PMID: 4860510 [PubMed - indexed for MEDLINE]

- ☐ **36:** Tacquet A. Related Article:  
[Isolation and identification of *Mycobacterium bovis*]  
Poumon Coeur. 1966;22(10):1139-42. French. No abstract available.  
PMID: 5335840 [PubMed - indexed for MEDLINE]

- ☐ **37:** Ribi E, Anacker RL, Brehmer W, Goode G, Larson CL, List RH, Milner KC, Wicht WC. Related Article:  
Factors influencing protection against experimental  
tuberculosis in mice by heat-stable cell wall vaccines.  
J Bacteriol. 1966 Oct;92(4):869-79. No abstract available.  
PMID: 5332873 [PubMed - indexed for MEDLINE]

- ☐ **38:** Ribi EE, Meyer TJ, Azuma I, Zbar B. Related Article:  
Mycobacterial cell wall components in tumor suppression and  
regression.  
Natl Cancer Inst Monogr. 1973 Dec;39:115-9. No abstract available.  
PMID: 4595311 [PubMed - indexed for MEDLINE]

- ☐ **39:** Barclay WR, Anacker R, Brehmer W, Ribi E. Related Article:

## Effects of oil-treated mycobacterial cell walls on the organs of mice.

J Bacteriol. 1967 Nov;94(5):1736-45. No abstract available.

PMID: 4965197 [PubMed - indexed for MEDLINE]

☒ **40:** [Shepard CC, Ribi E.](#)

Related Article:

Cell walls from *Mycobacterium tuberculosis* (BCG) as vaccine against *Mycobacterium leprae* infections in mice.

Proc Soc Exp Biol Med. 1968 Feb;127(2):517-21. No abstract available.

PMID: 4967027 [PubMed - indexed for MEDLINE]

Display	Summary	▼	Sort	▼	Save	Text	Clip Add	Order
Show:	20	▼	Items 21-40 of 123		Page 2 of 7 Select page: 1 2 3 4 5 6 7			

[Write to the Help Desk](#)

[NCBI](#) | [NLN](#) | [NIH](#)

[Department of Health & Human Services](#)

[Freedom of Information Act](#) | [Disclaimer](#)

i686-pc-linux-gnu May 24 2002 11:56:2





PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM

Search PubMed ☒ for

Limits Preview/Index History Clipboard De

Display Summary ☒ Sort ☒ Save Text Clip Add Order

Show: 20 ☒ Items 81-100 of 123 Page 5 of 7 Select page: 1 2 3 4 5 6 7

Entrez  
PubMed

Selected: 9

☒ 81: Hiu IJ, Amiel JL.

Related Article:

Isolation of immunological adjuvant component from B.C.G. cells.

Rev Eur Etud Clin Biol. 1971 Jan-Feb;16(1):55-8. No abstract available.  
PMID: 4929110 [PubMed - indexed for MEDLINE]

PubMed  
Services

☐ 82: Fine PE, Smith PG.

Related Article:

Vaccination against leprosy--the view from 1996.

Lepr Rev. 1996 Dec;67(4):249-52. Review. No abstract available.  
PMID: 9033195 [PubMed - indexed for MEDLINE]

☐ 83: Cameron CM, Minnaar JL, Purdom MR.

Related Article:

Immunizing properties of Corynebacterium pseudotuberculosis cell walls.

Onderstepoort J Vet Res. 1969 Dec;36(2):211-6. No abstract available.  
PMID: 5407586 [PubMed - indexed for MEDLINE]

☐ 84: Stavri D, Niculescu D, Stavri H, Popa V.

Related Article:

Antigenic composition of different BCG substrains studied by rocket-line immunoelectrophoresis.

Arch Roum Pathol Exp Microbiol. 1981 Apr-Jun;40(2):113-21. No abstract available.  
PMID: 7030272 [PubMed - indexed for MEDLINE]

Related  
Resources

☒ 85: [No authors listed]

Related Article:

1st International Conference on Cell Wall-Derived Immunomodulators and synthetic adjuvants. Sinaia, Romania, 12-17 September 1993. Selected papers.

Int J Immunopharmacol. 1994 May-Jun;16(5-6):369-493. No abstract available.

PMID: 7927980 [PubMed - indexed for MEDLINE]

☐ **86:** Beaudet R, Frenette M, Portelance V.

Related Article:

Stimulation of non-specific anti-tumour resistance in the mouse using cell wall preparations from four BCG substrains.

Ann Immunol (Paris). 1983 Mar-Apr;134C(2):215-26.

PMID: 6223571 [PubMed - indexed for MEDLINE]

☐ **87:** Rzucidlo L, Piwowarczyk M, Ziolecka I, Grubek H.

Related Article:

Studies on mycobacterial sensitizing fractions. 3. PPD and PPD-S protein preparations isolated from four BCG substrains

Acta Microbiol Pol A. 1969;1(1):33-40. No abstract available.

PMID: 4905006 [PubMed - indexed for MEDLINE]

☐ **88:** Finger H.

Related Article:

[Adjuvant effect of mycobacteria]

Klin Wochenschr. 1966 Oct 1;44(19):1105-11. Review. German. No abstract available.

PMID: 5333120 [PubMed - indexed for MEDLINE]

☐ **89:** Esaguy N, Aguas AP.

Related Article:

Prevention of adjuvant arthritis in Lewis rats by neonatal bacille Calmette-Guerin (BCG) infection.

Clin Exp Immunol. 1996 Apr;104(1):103-7.

PMID: 8603513 [PubMed - indexed for MEDLINE]

☐ **90:** Bosio CM, Orme IM.

Related Article:

Effective, nonsensitizing vaccination with culture filtrate proteins against virulent *Mycobacterium bovis* infections in mice.

Infect Immun. 1998 Oct;66(10):5048-51.

PMID: 9746617 [PubMed - indexed for MEDLINE]

☐ **91:** Azuma I, Ribi EE, Meyer TJ, Zbar B.

Related Article:

Biologically active components from mycobacterial cell walls. I Isolation and composition of cell wall skeleton and component P3.

J Natl Cancer Inst. 1974 Jan;52(1):95-101. No abstract available.

PMID: 4590014 [PubMed - indexed for MEDLINE]

- ☐ **92:** Inoue Y. Related Article:  
[A comparison of proteins in mycobacterial culture filtrates]  
Kekkaku. 1967 Apr;42(4):129-35. Japanese. No abstract available.  
PMID: 4965144 [PubMed - indexed for MEDLINE]
- ☐ **93:** Goedemans WT. Related Article:  
The immunogenicity of some experimental parainfluenza  
3-BVD-Pasteurella haemolytica vaccines in calves and mice.  
Zentralbl Veterinarmed [B]. 1970 Apr;17(4):508-21. No abstract available.  
PMID: 5516858 [PubMed - indexed for MEDLINE]
- ☐ **94:** Jacobs DM, Kripke ML. Related Article:  
Accelerated development of transplanted mammary tumors in  
mice pretreated with the methanol extraction residue of BCG  
and prevention of acceleration by concomitant specific  
immunization.  
J Natl Cancer Inst. 1974 Jan;52(1):219-24. No abstract available.  
PMID: 4590011 [PubMed - indexed for MEDLINE]
- ☐ **95:** Fantini F, Cattaneo R, Invernizzi F. Related Article:  
[Effects of indomethacin on arthritis induced by adjuvants in  
rats]  
Reumatismo. 1965 May-Jun;17(3):163-74. Italian. No abstract available.  
PMID: 5848484 [PubMed - indexed for MEDLINE]
- ☐ **96:** Potier JC. Related Article:  
[Immune tolerance]  
Infirm Fr. 1969 Feb;102:31-2. French. No abstract available.  
PMID: 5192889 [PubMed - indexed for MEDLINE]
- ☐ **97:** Laughlin JA, Harris SC, Fine R, Collins JF. Related Article:  
Lung injury induced by mycobacterial cell walls: effects on  
connective tissue.  
Exp Mol Pathol. 1981 Dec;35(3):380-7. No abstract available.  
PMID: 7030775 [PubMed - indexed for MEDLINE]
- ☐ **98:** Sutherland RI, Spadaro-Antonelli MA, Lawrence VJ, Quagliata F. Related Article:  
Immunosuppressive activity of BCG: effects of adjuvant  
disease, lymphocyte subpopulations, and homing of thoracic  
duct cells in rats.  
Infect Immun. 1979 Jul;25(1):310-9.

PMID: 383618 [PubMed - indexed for MEDLINE]

☐ **99:** Coletsos PJ.

Related Article:

[Isolation of the bovine bacillus by culture under a gelatin coating]

Poumon Coeur. 1966;22(10):1143. French. No abstract available.

PMID: 5335841 [PubMed - indexed for MEDLINE]

☒ **100:** Gialdroni-Grassi G, Grassi C.

Related Article:

Bacterial products as immunomodulating agents.

Int Arch Allergy Appl Immunol. 1985;76 Suppl 1:119-27. No abstract available.

PMID: 2858453 [PubMed - indexed for MEDLINE]

Display	Summary	▼	Sort	▼	Save	Text	Clip Add	Order
Show:	20	▼	Items 81-100 of 123		Page 5 of 7 Select page: 1 2 3 4 5 6 7			

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Freedom of Information Act](#) | [Disclaimer](#)

sparc-sun-solaris2.8 May 24 2002 12:01:1